Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DONIVAN M. SHETTERLY and CHRISTOPHER A. HERSCH

Appeal No. 1998-3060
Application No. 08/703,932

HEARD; October 11, 2000

Before COHEN, NASE, and JENNIFER D. BAHR, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 4 to 16, 22 and 23, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to an apparatus for forming a heated glass sheet. A substantially correct copy of the claims under appeal is set forth in the appendix to the appellants' brief.[1]

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Kulig et al. (Kulig)	3,826,381	July 30, 1974
Tsutsui	4,561,688	Dec. 31, 1985
Nitschke et al. (Nitschke '141)	4,661,141	Apr. 28, 1987
Frank et al. (Frank)	4,711,653	Dec. 8, 1987
Orain	4,840,657	June 20, 1989
Nitschke (Nitschke '437)	4,877,437	Oct. 31, 1989

Claims 1, 11, 12/11 and 13 to 16 stand rejected under

[1] An error in claim 6 was noted by the examiner on page 3 of the answer (Paper No. 23, mailed July 6, 1998).

35 U.S.C. § 103 as being unpatentable over the combined teachings of Nitschke '141 and Kulig.

Claims 4 to 6, 22 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Nitschke '141 and Kulig as applied to claims 1, 11, 12/11 and 13 to 16 above, and further in view of Tsutsui.

Claims 10 and 12/10 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Nitschke '141 and Kulig as applied to claims 1, 11, 12/11 and 13 to 16 above, and further in view of Orain.

Claims 1, 7 to 9 and 13 to 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Frank and Kulig.

Claims 4 to 6, 22 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Frank and Kulig as applied to claims 1, 7 to 9 and 13 to 16 above, and further in view of Nitschke '141 and Tsutsui.

Claims 1, 4 to 6, 11, 12/11, 13 to 16, 22 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nitschke '437 in view of Kulig.

Claims 7 to 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nitschke '437 in view of Kulig as applied to claims 1, 4 to 6, 11, 12/11, 13 to 16, 22 and 23 above, and further in view of Frank.

Claims 10 and 12/10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nitschke '437 in view of Kulig as applied to claims 1, 4 to 6, 11, 12/11, 13 to 16, 22 and 23 above, and further in view of Orain.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 22, filed May 18, 1998) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, the declaration of James E. Heider (Paper No. 6, filed January 16, 1996) and to the respective positions articulated by the appellants and the examiner. Upon evaluation of **all** the evidence before us, it is our conclusion that the evidence is insufficient to establish a case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1, 4 to 16, 22 and 23 under 35 U.S.C. § 103. Our reasoning for this determination follows.

A case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

In this case, the evidence only establishes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have modified the glass bending systems of Nitschke '141, Frank and Nitschke '437 by providing their respective vacuum system with a vacuum reservoir as suggested by Kulig in order to provide a level of vacuum up to about 10 inches water column (0.0242 atmospheres of vacuum).

All the claims under appeal require that the recited apparatus includes a vacuum system that provides a vacuum impulse of at least 0.1 atmospheres of vacuum.[2] In our view from the evidence before us in this appeal, this limitation would not have been obvious at the time the invention was made to a person having ordinary skill in the art for the following reasons. First, the evidence before us establishes that the level of vacuum known in this art was up to about 0.0242

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[2] A patent applicant is free to recite features of an apparatus either structurally or functionally. See In re Swinehart, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ([T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims).

atmospheres of vacuum, not even close to the claimed level of at least 0.1 atmospheres of vacuum. Second, there is no evidence in the record before us in this appeal, that the structure that can produce a vacuum level of about 0.0242 atmospheres of vacuum inherently possesses the capability of generating and processing the claimed level of at least 0.1 atmospheres of vacuum.

For the reasons set forth above, the decision of the examiner to reject claims 1, 4 to 16, 22 and 23 under 35 U.S.C.
§ 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 4 to 16, 22 and 23 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN Administrative Patent Judge	)	
JEFFREY V. NASE Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JENNIFER D. BAHR Administrative Patent Judge	)	

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